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ABSTRACT

From April 16, 1987 through September 1, 1987, personnel from the Bureau of Educational Research and Services of Memphis State University (Tennessee) and Navy research team members from each of the Recruit Training Centers conducted a study that focused on learning outcomes of recruit training. The foci of the study were the Recruit Training Centers at Great Lakes, Illinois; Orlando, Florida; and San Diego, California, where a total of 596 recruits from 8 companies were involved in the 10-week data collection phase of the project. Hundreds of other recruits from numerous other companies, designated as cross-sectional, were involved in the study during the same time period. Data were gathered via personal data records, a list of recruit training outcomes developed by the Navy team members, and 11 other instruments. These other instruments covered barracks compartment watchstanding, free time activities, informal conversation, the recruit training interview protocol, physical training, nightly routine, recruit petty officer ratings, behavioral problems reported to the chief petty officer, and sick calls. The findings are reported on responsibility and reliability, accountability, obedience, teamwork, pride, self-discipline, goal-setting, perseverance, physical fitness, system manipulation, coercion, and competitiveness. Twelve data tables are included. (TJH)

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A DESCRIPTION OF SELECTED NON-COGNITIVE TRAINING OUTCOMES FOR RECRUITS AT NAVY RECRUIT TRAINING CENTERS

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Introduction

During the period of April 16, 1987 through September 1, 1987, personnel from the Bureau of Educational Research and Services of Memphis State University and Navy research team members from each of the Recruit Training Centers conducted a study that focused on the learning outcomes of recruit training at the Recruit Training Centers at Great Lakes, Illinois, Orlando, Florida, and San Diego, California. The study addressed primarily the acquisition or demonstration of behaviors reflecting selected non-academic outcomes of recruit training and examined secondarily the recruit training curriculum to determine the emphases given to the designated outcomes.

Population

The population involved in this study consisted of 596 recruits from eight target companies, designated as longitudinal, about whom data were collected during a ten-week period that covered their recruit training experiences. Several hundred other recruits at the Recruit Training Centers, representing numerous other companies, designated as cross-sectional, were also involved in the study during the same time period.

Among the longitudinal companies the population fluctuated during the observation period because of attrition. Companies lost about 25.5% of their original numbers but accrued replacements to maintain them at a minimum of 50 recruits per company and a maximum of 80 recruits per company.

The Recruit Personal Data Records of recruits in the longitudinal companies provided information about age, educational level, and mental group classification. Eighteen-year-olds (N=145) constituted the largest percentage of recruits (24.4%), followed by 19-year-olds (N=130, or 21.9%), and 20-year-olds (N=95, or 15.9%). Those who finished the 12th grade (N=438) constituted the largest percentage (73.6%), followed by those who achieved beyond the 12th

grade (N=101, or 16.9%). The largest number of recruits (N=244, or 45.2%) were in the mental group three; the second largest (N=228, or 42.2%), in the mental group two.

An analysis of the Recruit Personnel Data Record (hard card) indicated that their reasons for joining the Navy were personal enrichment (33.0% of the total number of responses, and 53.7% of the total number of recruits), which included reasons such as travel/adventure, self-improvement, change, leadership skills, self-discipline, and enjoyment; job/experience (30.8% of total responses, and 46.1% of the recruits), which included reasons such as career enhancement, new goals, income, and job opportunities; and education/training (28.7% of the total responses, and 47.9% of the recruits), which included such reasons as college, schooling, and educational benefits. Other reasons accounted for 7.5% of the total number of responses and 11.9% of the number of recruits and included family influence, getting away from circumstances, serving the nation, and patriotism.

Training Outcomes

Navy research team members established a list of recruit training outcomes they characterized as being present in recruit training: responsibility, reliability, accountability, system manipulation, obedience, competitive system, teamwork, perseverance, physical well-being, pride, self-discipline, goal-setting, and coercion. Information about the presence of these outcomes in recruit training was gathered through instruments created by project personnel and Navy research team members.

Instruments

A total of eleven instruments was constructed and used. They were the barracks compartment watchstanding checklist, the free time report form, the

informal conversation checklist, the Navy recruit training interview protocol, the physical training record form, the recruit nightly routine checklist, the LCPO screening/mast record form, the physical training test record form, the recruit petty officer rating form, and the sick call record form. Data were also gathered from the Recruit Personnel Data Record of each recruit in longitudinal companies. Each instrument dealt with at least one outcome, but only the Navy recruit training interview protocol dealt with all of them. A list of the outcomes and the instruments is on page 4.

The Barracks Compartment Watchstanding Checklist was designed to record the presence or absence of specific behaviors by recruits during watchstanding. Most of the behaviors related to responsibility while two behaviors ("arrived on time" and "quit watch properly") were indicative of reliability. The data on each behavior were summarized for two reporting periods: 1-1 to 3-5 days of training and 4-1 to 8-3 days of training. The results are reported for the longitudinal and cross-sectional companies as well as the composite for the two types of companies. The percentages of the recruits observed who demonstrated each behavior were computed.

The LCPO Screening/Mast Record Form was maintained to provide information on the degree of responsibility accepted by recruits when referred to LCPOs because of infractions. The data from the records were used as an indicator of accountability by recruits for their actions. The information was compiled for two reporting periods: 1-1 to 3-5 days of training and 4-1 to 8-3 days of training. The results are presented for the recruits in the longitudinal and cross-sectional companies and the composite for the two types of companies. The percentages were calculated for the levels of responsibility demonstrated by recruits.

The Recruit Petty Officer Rating Form was used to obtain ratings of

INSTRUMENTS UTILIZED TO COLLECT DATA ON
NAVY RECRUIT TRAINING OUTCOMES

Outcome	Instruments
1. Responsibility	- Barracks Compartment Watchstanding Checklist
2. Reliability	- Barracks Compartment Watchstanding Checklist
3. Accountability	- LCPO Screening/Mast Record Form - Recruit Petty Officer Rating Form
4. System manipulation	- Sick Call Record Form
5. Obedience	- Recruit Nightly Routine Checklist
6. Competitive system	- None
7. Teamwork	- Recruit Nightly Routine Checklist
8. Perseverance	- Physical Training Record Form
9. Physical well-being	- Sick Call Record Form - Physical Training Test Record Form
10. Pride	- Recruit Nightly Routine Checklist
11. Self-discipline	- Free Time Checklist
12. Goal-setting	- Informal Conversation Checklist
13. Coercion	- None

recruit petty officers on two factors: undertstanding of duties and accountability for duties. The ratings on the latter factor were one of the measures of accountability demonstrated by recruits. The Company Commanders assigned ratings from the perspective of typical recruits in the same positions. The data are presented for the recruits in the longitudinal and cross-sectional companies as well as the combined types of companies. The frequencies and percentages of ratings on each factor were computed for the rating scale of outstanding (4), high (3), moderate (2), and low (1).

The Recruit Nightly Routine Checklist was used to record the presence or absence of selected behaviors for which opportunities were observed during the nightly routine of the recruit companies. The four behaviors specified on the checklist related to three areas: one on obedience, two on teamwork, and one on pride. The data were compiled for two reporting periods: 1-1 to 3-5 days of training and 4-1 to 8-3 days of training. The results are presented for the longitudinal and cross-sectional companies and the composite for the two types of companies. The percentages of the recruits who demonstrated the behaviors when the opportunities occurred were calculated.

The Free-Time Report Form was completed by recruits to report on the use of free time for a variety of training-related and personal activities. Self-discipline was the variable to be addressed with these data. The data derived from the form are presented for recruits in the longitudinal and cross-sectional companies and the composite for both types of companies. Non-standardization of the times when data were collected at the site designations limited the analysis to compilation of the frequencies reported for specific activities, calculation of the percentages of recruits reporting specific activities, and computation of means per recruit for training-related and personal activities.

The Informal Conversation Checklist provided a means to record information on three types or perspectives of goals articulated by recruits at various points in time during recruit training. Goal-setting was the particular behavior of interest with respect to this information. The data were summarized for two reporting periods: 1-1 to 3-5 days of training and 4-1 to 8-3 days of training. Tabular presentations of data are reported for longitudinal and cross-sectional companies as well as the composite for the two types of companies. The percentages of stated goals classified by the three types were calculated for training periods.

The PT (Physical Training) Record Form was utilized to report the number of recruits who completed or failed to complete periodic physical training activities during recruit training. Performance in physical training provided an indication of preseverance by recruits. The data were compiled for two reporting periods: 1-1 to 3-5 days of training and 4-1 to 8-3 days of training. The results are presented for the recruits in the longitudinal and cross-sectional companies as well as the composite for both types of companies. The analysis consisted of calculating the percentages of recruits who completed the physical training activities.

The PT (Physical Training) Test Record Form provided data on the performance of recruits for each of the three PT tests during recruit training. These data were used as an indicator of physical well-being of the recruits. The results are reported for the recruits in the longitudinal and cross-sectional companies by test. Composite data are also presented for the two types of companies. The percentages of recruits who passed the PT tests were derived from the data collected.

The Sick Call Record Form was utilized to record information on each occasion that a recruit was sent to sick call, specifically the result of the

sick call and the coincidence of any sick call with an inspection. The data obtained from these records were expected to provide measures on two variables: physical well-being of recruits and system manipulation through the use of sick call for non-performing recruits during inspections. The information was compiled for the longitudinal and cross-sectional companies and the composite for the two types of companies. Separate analyses were performed with the data and reported for the two variables. To address physical well-being of recruits, the number and percentages were derived for the results of the sick calls (i.e., the disposition of each case). With regard to system manipulation, the results reported include the total numbers of sick calls, numbers of sick calls during inspections, and percentages of total sick calls that occurred during inspections. (A sick call was classified as occurring during an inspection if the recruit was at sick call concurrent with an inspection.) The results are discussed sequentially for physical well-being and system manipulation.

While being used in actual data gathering, only one instrument was modified, the free time report form, which was revised from being an observation instrument of the data collector to being an instrument filled out by the recruit to account for all of her/his free time.

Data Collection

Data were collected by data collectors working in conjunction with Navy personnel at each of the Recruit Training Centers. They recorded their observations on the barracks compartment watchstanding checklist, the informal conversation checklist, the physical training record form, and the recruit nightly routine report form. They administered the free time report form to recruits and from various persons and offices picked up the Recruit Personnel Data Record, the LCPO screening/mast record form, the physical training test

record form, recruit petty officer rating form, and the sick call record form. The data collectors recorded on the recruit training interview protocol forms the statements made by recruits in response to questions that they asked them. An original plan for the collection of data, shown on page 9, was established and followed except where constraints affected the time of collection or the opportunity for collection.

Data were collected from both longitudinal companies and cross-sectional companies on all instruments (the cross-sectional data collection was random on both companies and instruments). They were obtained either from interview, observations, records, or ratings. The methods of collection for the outcomes are depicted below.

Navy Recruit Training Outcomes

	Recruit Instrumentation			
	Interview	Observation	Records	Rating
1. Responsibility	X	X		
2. Reliability	X	X	X	
3. Accountability	X		X	X
4. System manipulation	X		X	
5. Obedience	X	X		
6. Competitive system	X			
7. Teamwork	X	X		
8. Perseverance	X	X		
9. Physical well-being	X		X	
10. Pride	X	X		
11. Self-discipline	X	X		
12. Goal-setting	X	X		
13. Coercion	X			

Data Collection Plan for Instruments/Records

Instrument	Data Recorder	Subject(s)	Frequency of Use	
			Longitudinal	Cross-Sectional
Barracks Compartment Watchstanding Checklist	Data Collector	Watchstander	Weekly	4 times/each of 4 companies
Free Time Checklist	Data Collector	Small groups of recruits	1-2 times per week	4 times/each of 4 companies
Informal Conversation Checklist	Data Collector	Small groups of recruits	2 times per week	2 times/each of 4 companies
Navy Recruit Training Interview Protocol	Data Collector	3 groups of 2-3 recruits each	1 time per company/after graduating	2-3 recruits per company/weekly
PT Record Form	Data Collector	Entire company	2 times per week	1 time per week/ 4 companies
Recruit Nightly Routine Checklist	Data Collector	Small groups of recruits	1 time per week	4 times/each of 2 companies
Data from Recruit Personal Data Record	Data Analysis Unit	Each recruit in company	2 times per company	_____
LCPO Screening/Mast Record Form	Leading Chief Petty Officer	All referred recruits	Daily	2-week period/each of 4 companies
PT Test Record Form	Physical Training Division	Entire company	Each of 3 PT tests	3 PT tests/ 2 companies
Recruit Petty Officer Rating Form	Two Company Commanders (independently)	RPO2, RPO1, and RCPO/RPOC	1 time per company after competition	1 time per company/2 companies
Sick Call Record Form	Recruit Yeoman	All referred recruits	Daily	Daily/2 companies

Data were collected at various times during the week. Scheduling related to the availability of the recruits being at specified locations, the involvement of entire companies participating in an activity. the opportunity of recruits to meet in either small or large groups to respond to instruments, the adherence to posted schedules, and the limited amounts of time allocated for specific activities.

Data were gathered individually from recruits on watchstanding duty; from groups of recruits on the free time checklist, the informal conversation checklist, the Navy recruit training interview protocol, and the recruit nightly routine checklist; from all referred individuals on the LCPO screening/mast record form and the sick call record form; from all recruits on the physical training record form, the Recruit Personnel Data Record, the physical training test record form; and from Company Commanders on the recruit petty officer rating form.

The collection totaled 13,604 items of information relating to the 596 recruits in longitudinal companies and to the other recruits in cross-sectional companies. Table 1 depicts the number of data items by type of company and by instrument.

TABLE 1

NUMBER OF RECRUIT SUBJECTS IN LONGITUDINAL AND CROSS-SECTIONAL COMPANIES BY DATA SOURCE

Data Source	Type of Company		Total
	Longitudinal N	Cross-sectional N	N
Barracks Compartment Watchstanding Checklist	55	46	101
Free Time Checklist	201	239	440
Informal Conversation Checklist	331	114	445
Navy Recruit Training Interview Protocol	72	134	206
PT Record Form	2,136	4,229	6,365
Recruit Nightly Routine Checklist	693	376	1,069
Data from Hard Card	596	-----	596
LCPO Screening/Mast Record Form	44	129	173
PT Test Record Form	1,426	1,165	2,591
Recruit Petty Officer Rating Form	136	118	254
Sick Call Record Form	654	710	1,364
Total	6,344	7,260	13,604

Findings

The results of the total data collection efforts are presented in this section of the report. The findings for the first ten variables are sequenced and grouped, where necessary, according to the instrumentation used for observations, reports, and ratings. Following the presentation of the tabular data from the instrumentation for each variable or group of variables, the information derived from the interviews of recruits after graduation is summarized. The tables of data from the instruments are found in Appendix A.

Responsibility and Reliability

The variables identified as responsibility and reliability were addressed with one instrument that focused on watchstanding in the barracks compartment. Six of the behaviors to be observed related to responsibility while two were concerned with reliability. A set of interview questions on watchstanding provided additional information, primarily on responsibility.

The composite data for the longitudinal and cross-sectional companies from the Barracks Compartment Watchstanding Checklist are summarized in Table 2. During the two reporting periods, the desired behaviors were demonstrated in about 87% and 86% of the instances for the first and second periods, respectively. The percentages for the specific behaviors related to responsibility (the items excluding "arrived on time" and "quit watch properly") ranged from 55% to 100% during the first period and from 63% to 98% during the second period. Challenging persons correctly was the least prevalent behavior observed during both periods, showing slight improvement from the first period to the second period. The two behaviors indicating reliability (arriving on time and quitting the watch properly) were exhibited more often during the first period (90% and 92%, respectively) than during the second

period (88% and 83%, respectively). The greater decline occurred in quitting the watch properly.

The interview protocol addressed responsibility and reliability through a series of questions on several topics related to watchstanding: purposes, importance, scope of responsibility, and knowledge of and reasons for selected general orders of a sentry. The most frequent response on the purposes referred to security and safety of property and personnel. Other responses represented more nebulous concepts of purposes, such as training for the fleet, or specific watchstanding functions, such as keeping records of events. The importance of watchstanding was usually answered by restating the purposes rather than explicating why the stated purposes are important to the Navy. The scope of responsibility of watchstanders in operational settings was articulated primarily in one of two ways: the purpose of watchstanding or execution of the general orders.

When asked to recite and give reasons for four specific general orders (2, 5, 7, and 11), the interviewees could recite the orders with substantive accuracy. The reasons given for the orders tended to be restatements of the orders rather than explanations of the needs served by the orders. The more notable exceptions were responses that indicated relationships between talking only in the line of duty and remaining alert or quitting the watch properly to ensure manning of the watch at all times.

Accountability

Accountability was assessed with two instruments used to collect data on recruits. The LCPO Screening/Mast Record Form provided information on the perceived extent to which recruits who were referred to LCPOs appeared to accept responsibility for the infractions that had occurred. The data of primary interest from the RPO Rating Form were the ratings on accountability

for duties with understanding of duties being of secondary interest. Questions on the interview protocol were concerned with the meaning of accountability, any examples of recruit accountability during recruit training, and the sense of personal accountability during recruit training in some specific areas.

Table 3 presents the composite results for the longitudinal and cross-sectional companies from the LCPO Screening/Mast Record Form. The number of cases shown in the first and second reporting periods are affected by differences in established procedures at the three Recruit Training Centers for processing recruits before referral to LCPOs. An additional limitation is that data were not available from all sites for both reporting periods. Approximately 71% and 74% of the referred recruits in the first and second reporting periods, respectively, accepted mostly or completely responsibility for their infractions. Slightly over 5% of the recruits in each reporting period denied responsibility for their infractions or denied the infractions. The distributions of cases in the various categories were relatively similar for the two types of companies and two reporting periods with the exception of the second reporting period for the longitudinal companies when most recruits accepted responsibility mostly or completely.

The results of compiling the data for the longitudinal and cross-sectional companies for the RPO Rating Form are reported in Table 4. The composite of the ratings on accountability for duties revealed that 55% of the recruits were rated as outstanding and 32% were rated as high. The longitudinal company recruits as a group tended to receive slightly lower ratings on accountability than the cross-sectional company recruits. On understanding of duties, 47% and 42% of the recruits in cross-sectional companies received ratings of outstanding or high, respectively. The ratings on understanding also indicated slightly lower ratings as a group for longitudinal company recruits than

cross-sectional company recruits.

In the interviews, the meaning of accountability was defined most frequently by recruits as being responsible or accountable for one's own actions. Other meanings expressed by fewer recruits focused on being accountable for subordinates or being responsible to the chain of command. Related comments of some recruits reflected the view that accountability rests with the individual. The most commonly cited examples of accountability during recruit training were preparation for inspections and academic tests, discharge of responsibilities as recruit petty officers, and assumption of responsibilities for own and others' mistakes. Other examples included specific duties (e.g., standing watch or keeping personal gear squared away) and general expectations (e.g., appearance/military bearing).

The recruits who were interviewed were asked about the extent to which they felt personally accountable during recruit training for their own performance on tests, behavior on base, behavior on liberty, and grooming and bearing at all times. None of the respondents implied that they were not accountable to some extent in these areas. About two thirds of the recruits indicated that accountability for test performance is self-oriented and reflects on themselves. Comments regarding accountability for behavior on base ranged from avoidance of negative consequences to a positive personal desire to comply with military standards. With few exceptions, recruits expressed a strong appreciation for projecting a positive and proper military bearing and image of the Navy while on liberty. Recruits also indicated a strong positive awareness of the need to maintain proper grooming and bearing at all times.

Obedience

One item on the Recruit Nightly Routine Checklist was used to provide information on the degree to which recruits exhibited obedience as demonstrated

by a specific behavior in the barracks compartment. Interview questions addressed the meaning of obedience, the importance of obedience, differentiation between lawful and unlawful orders, and response to a perceived unlawful order.

The composite data for the longitudinal and cross-sectional companies from the Recruit Nightly Routine Checklist are reported in Table 5. Obedience was the variable addressed by the item that focused on the responsiveness of recruits to orders of the RPOs. Based on the numbers of observed occasions when RPOs gave orders to recruits, the orders were followed immediately in 79% of the cases during the first reporting period and 77% of the cases in the second reporting period. The differences in percentages for the two types of companies were not appreciable in either of the two reporting periods.

The meaning of obedience given by most recruits who responded in the interviews was to follow orders without question or hesitation. Several less frequently stated responses related to connotative or implied meaning of obedience, e.g., self-control, discipline, and respect for authority. The responses on the importance of obedience in the Navy were diverse in substance. Preventing confusion or instilling order was the most common answer. A consequence of obedience, maintaining security and safety, was the second ranking answer based on frequency. Several responses failed to focus clearly on the question (e.g., getting the job done right and key to survival).

In responding to the question about the difference between a lawful order an an unlawful order, the limited number of responses indicated that recruits most often attempted to define a lawful order (answers such as legal or does not endanger someone) and an unlawful order (answers such as illegal or not in accord with the Uniform Code of Military Justice). Differentiation between lawful and unlawful orders was unclear in the responses. If confronted with an

order from a commissioned officer that they thought was unlawful, most recruits stated that they would obey the order. Among the recruits who would obey the order, most would take subsequent actions by questioning the order later or reporting it to higher authority for review. Several recruits indicated that they would analyze the order before making a decision.

Teamwork

Observations of teamwork were conducted with two items on the Recruit Nightly Routine Checklist that focused on two types of situations where teamwork could be exhibited in the barracks compartment. Questions on the interview protocol pertained to the meaning of teamwork, use of teamwork in the company, contribution of teamwork to company success, and response of the company to reassigned recruits.

The data for the two items on the Recruit Nightly Routine Checklist dealing with teamwork are presented in Table 5. The observations on assisting other recruits when they are present (indicative of individual initiative in teamwork) revealed such behavior in 81% of the cases during the first reporting period and 78% of the cases during the second reporting period. Based on the observations of doing tasks for recruits assigned elsewhere (indicative of group initiative in teamwork), the desired behavior was exhibited in 86% of the cases during the first reporting period and 87% of the cases during the second reporting period. On both behaviors, the observations indicated decreases from the first reporting period to the second reporting period for the longitudinal companies and increases for the cross-sectional companies.

In responding to the interview question on the meaning of teamwork, the most frequent answer from recruits substantively was working together. An appreciable number of recruits defined teamwork in terms of working for common goals. The use of teamwork in the recruit companies identified most often was

helping each other with daily requirements of training and preparing for inspections. Some of the responses on use of teamwork had negative connotations, e.g., working for recognition through performance on inspections or using teamwork sparingly. The comments on the contribution of teamwork to the company's success most frequently linked teamwork to success in unspecified ways. In a negative or positive way, the second most frequent response on teamwork and company success related teamwork to higher scores or more recognitions of performance.

One interview question focused on the response of the company toward reassigned (set-back or recycled) recruits. The comments differed depending on whether the company was receiving or losing the recruits. The most common response was that the recruits received were welcomed by the company and the Company Commander. In the aggregate, more negative comments than positive comments were made about acceptance of recruits only after they proved themselves, negative acceptance by the company or Company Commander, or assumption that ""They were someone's rejects." Recruits being reassigned from the company most often created feelings of sympathy or sadness because they were missed by the remaining company members. Sympathy was not extended to recruits who could not or would not meet training standards.

Pride

One item on the Recruit Nightly Routine Checklist addressed pride as evidenced by the use of Navy vocabulary or terminology in the barracks compartment when a Navy word or term could be utilized. Interview questions solicited responses on feelings when the recruit put on the dress uniform for the first time, action to be taken if a shipmate wears the uniform improperly or behaves improperly in uniform, and feelings when hearing the National Anthem.

The observational data for the item on the Recruit Nightly Routine Checklist that relates to pride are reported in Table 5. The use of Navy vocabulary and terminology was observed in 79% of the cases during the first reporting period and 89% of the cases during the second reporting period. In each reporting period, the percentages were higher for the longitudinal companies than the cross-sectional companies. An increase of approximately 8% occurred for each type of company from the first reporting period to the second reporting period.

The interviewees gave generally positive responses to the question about their feelings when they put on their dress uniforms for the first time. The most common reply was that they felt proud or great pride. Other responses referred to sense of accomplishment, feeling like a real sailor, or excited. When a hypothetical situation was posed in which a shipmate wears the uniform improperly or misbehaves in uniform, the overwhelmingly most common response was to inform and correct the shipmate because the situation would reflect negatively on the recruit and/or the Navy. Reactions to the National Anthem after joining in the Navy were described by referring to feeling proud, my flag/my country, identification of the Navy with the anthem, and being more meaningful.

Self-Discipline

One instrument was employed to obtain data on the variable labeled self-discipline. The instrument was designed for recruits to report the activities chosen to conduct during periods of free time on the master training schedule. A set of interview questions focused on the meaning of self-discipline, application of self-discipline during recruit training, and experiences in recruit training that helped to develop self-discipline.

Table 6 presents a composite summary of the data for the longitudinal and

cross-sectional companies from the Free Time Report Form. Some precautions must be observed in interpreting the results. The initial intention was for the data to be collected for a block of 3-4 hours on Sunday morning that presumably was scheduled free time. At one training site, the recruits have only the options of attending church or studying in the barracks compartment. At another training site, the data collection was conducted during the nightly routine time period as well as on Sunday mornings. The composite mean for total activities was 4.5 per recruit based on separately derived means of 2.8 per recruit for the five training-related activities and 1.8 per recruit for the three personal activities. The most frequently chosen training-related activities were studying (77% of the recruits) and shining shoes (75% of the recruits). Writing letters (74% of the recruits) was the most common choice among the personal activities. The means for types of activities and percentages of recruits choosing each activity were very similar for the longitudinal and cross-sectional companies.

In defining self-discipline during the interviews, the most common definition given was self-control, followed by doing the right things without being told. Other responses represented consequences or particular applications of self-discipline. The principal application of self-discipline during recruit training was reported to be management of personal behavior. Controlling desire to talk and accepting orders without question were other applications cited. The most common experience identified as helping to develop self-discipline was motivational exercises. Other experiences cited with less regularity included fear of separation from the company or failure, mass discipline, and motivation from company commanders.

Goal-Setting

Goal-setting of recruits was described by using an instrument to record

the results of informal conversations that were conducted with a few recruits at a time to elicit their comments on goals (short-term individual, short-term company, and longer-term individual goals). The interview protocol contained questions on what had been learned in the Navy about goal-setting, goals after recruit training, and changes in goals during recruit training.

The composite data for the longitudinal and cross-sectional companies from the Informal Conversation Checklist are summarized in Table 7. The inconsistent use of codes to account for the goals of all recruits involved in the conversations on a few occasions at some sites is a slightly delimiting factor with respect to the precision of the data. The composite results revealed that 62% of the recruits in the first reporting period stated individual goals pertaining to recruit training while 28% articulated goals dealing with company recognition. In the second reporting period, the reduction in the prevalence of individual goals during recruit training to 36% was accounted for by an increase in individual goals after recruit training to 36%. The generally similar patterns for percentages of goals in the three categories for the two types of companies during the first reporting period did not pervail during the second reporting period. The differences for the second period showed a much higher percentage of individual goals during recruit training for the cross-sectional companies and a much higher percentage of company recognition goals for the longitudinal companies.

The principal learning about goal-setting in the Navy cited by the recruits during the interviews was to set goals and work toward achieving them. The necessity for having goals to achieve was the next most frequently stated learning. Other comments on this topic pertained to making short-term goals in order to achieve long-term goals and learning how to establish goals. In descending order, the goals after recruit training that were articulated by

recruits were the following: complete "A" school, get additional education, gain a commission, and advance in pay grade. Pursuing a career based on Navy training, not necessarily in the Navy, was mentioned by a few recruits. In commenting on changes made in goals during recruit training, a large majority of the responses indicated that no changes had been made.

Perseverance

Data were obtained on the variable titled perseverance by maintaining records on the physical training performance of recruit companies during recruit training. Interview questions were structured to elicit comments on any thoughts about giving up or quitting, reasons for not quitting, and importance of trying rather than quitting.

Table 8 contains the summarized data for the longitudinal and cross-sectional companies for the PT (Physical Training) Record Form. The results should be interpreted with the following factors in mind: only one training site has a structured PT program, observation of activities varied from only the run at one site to all PT activities at another site, and one longitudinal company at one site did not participate in PT during the second reporting period. About 89% of the recruits observed during the first reporting period completed the PT activities. During the second reporting period, over 92% of the recruits completed the PT activities, representing a 3% increase over the first period. The longitudinal companies performed slightly better than the cross-sectional companies in both the first and second reporting periods.

The interviews revealed that the first two weeks of training were the most frequently mentioned time when recruits thought about quitting. Motivational exercises prompted some recruits to consider giving up. Among recruits who considered giving up, personal pride was the most commonly stated reason to

keep going. Keeping goals in mind and family support/pride were other frequently mentioned reasons to keep going. In responding to the question on the importance of trying rather than quitting in unpleasant situations, personal pride or self-respect was most often cited as the reason. Other stated reasons were that quitting is habit forming and persistence builds character.

Physical Well-Being

Two instruments were utilized to collect data on the physical well-being of recruits during recruit training. One instrument was employed to record the numbers of recruits who passed and failed each of three Physical Training (PT) Tests included in the training progam. The second instrument, the Sick Call Record Form, was maintained by the company to record the disposition of each sick call by recruits. Questions on the interview protocol asked about changes in physcial condition of recruits during training, reasons for any changes, starting or quitting smoking during training, and attitudes towards the Navy's policies on illegal drug use and alcohol abuse.

The composite results of the PT tests for the longitudinal and cross-sectional companies from the PT Test Record Form are depicted in Table 9. At two training sites, PT Tests 1 and 2 are administered during the first and fourth weeks of training and approximately two weeks later at the third training site. PT Test 3 is administered during the seventh week of training at all sites. Each PT Test is progressively more difficult with respect to performance requirements. The data for the combined types of companies revealed an overall pass rate of 93% with a pattern of neglible increases from the first test through the third test. The longitudinal companies had only a slightly higher pass rate than the cross-sectional companies on the composite for the three tests.

Table 10 presents a summary of the composite data on the disposition of sick calls for the longitudinal and cross-sectional companies from the Sick Call Record Form. The results indicated that 73% of the recruits were returned to full duty, 15% were assigned to light duty, and 7% were assigned to bed rest. Slightly less than 5% of the recruits were reassigned to other companies. The percentages for the various categories of disposition were relatively comparable for the two types of companies.

The interviews of recruits indicated that the majority who expressed opinions on changes in their physical condition since beginning recruit training were in better condition to at least some extent. More recruits perceived their condition to be worse than perceived no change. The most commonly cited reason for better physical condition was the PT program. Several reasons mentioned with almost equal frequency were motivational exercises, personal PT, military drill, and regular meals/diet. Worse physical condition was atttributed almost solely to insufficient PT. A few recruits reported that they had quit smoking and fewer had started smoking during recruit training. Strong support was expressed for the Navy's policies on illegal drug use and alcohol abuse.

System Manipulation

Information was obtained on the variable defined as system manipulation by deriving information from the sick call records on the incidence of sick calls during scheduled company inspections. Questions were included on the interview protocol that addressed things done by companies during recruit training to get better scores on inspections, preparation for inspections, and ways that slower recruits were helped during inspections.

The composite data on the incidence of sick calls during inspections obtained for the longitudinal and cross-sectional companies for the Sick Call

Record Form are summarized in Table 11. The composite results indicated that slighlty less than 6% of the sick calls were reported at times coinciding with inspections. The percentages for the longitudinal and cross-sectional companies were slightly in excess of 6% and 5%, respectively.

The interview questions things done by companies during recruit training to get better scores on inspections elicited a variety of responses. Listed in descending order of frequency mentioned, acceptable ways of getting better scores were practices and drills, teamwork, morning clean-up crews, and Company Commander motivation/rewards. Negative ways of manipulating the system that were mentioned by recruits included sleeping on the floor in other compartments prior to inspections, recruits doing inspection requirements for other recruits, being dressed totally by the Company Commander, hiding recruits during inspections, and pressing inspection items. Many other ways of manipulating the system negatively were identified by smaller numbers of recruits.

In describing preparation for inspections, most of the comments referred to acceptable practices. The most common responses were practice and drill, teamwork, and morning clean-up crew. Negative system manipulation was indicated by the Company Commander dressing or shaving recruits and several other singly mentioned activities. Slower recruits were reportedly helped during inspections primarily in acceptable ways, such as teamwork, extra practice, and special attention by shipmates and Company Commanders. Being "carried by the Company", i.e., doing the work for the recruit, was the principal way in which negative system manipulation was used with slower recruits.

Coercion

The only procedure employed to obtain information on the variable identified as coercion was the interview protocol. The series of questions

formulated were concerned with ways that the recrutis felt pressure to perform during recruit training, source of motivation to do the things expected during recruit training perception of the use of fear or force by company leaders to get things done, an extent to which force or fear would be used by the recruit as a leader.

Based on the interviews, the most commonly mentioned types of pressure to perform or do things in recruit training were Company Commander pressure and Company Commander threats to set back or recycle recruits. Avoidance of motivational exercises was cited less often as a source of pressure. The competitive system and self-pressure were also identified to some extent as sources of pressure. When asked whether they did the things expected during recruit training because they were told to do them or because they thought it was best to do them, the most frequent response was for both reasons. Almost as many responses were because they thought it was best to do them. Relatively few respondents mentioned being told to do things only as the source of motivation.

Most recruits had perceptions that company leaders had used force or fear to some extent to get things done. Few recruits felt that force or fear had not been used at all. When asked about their own expectations regarding the use of force or fear as leaders, a large majority of the respondents indicated little or no use of force or fear would be expected of themselves. Use of force or fear was perceived as a potential if the situation or task warranted. Leadership by respect or example was mentioned as the expected style by some recruits.

Competitive System

The interview protocol was the only data collection procedure used to deal directly with the variable labelled competitive system. The questions asked

of recruits focused on factors used personally to evaluate company success, evaluation of company success using these factors, accuracy of the factors in providing an appropriate evaluation of company success, and usefulness of the factor to indicate the readiness of recruits for fleet assignments.

The principal factor identified by recruits in the interviews for personally evaluating company success was teamwork. The two factors mentioned by much smaller numbers of recruits were flags/awards/company scores and attitudes/motivation. A diverse array of factors identified by recruits did not have a central theme or common thrust. Using the factors stated, the companies were judged to be very or highly successful by the largest number of recruits based primarily on company standing in the training group and teamwork. The other respondents indicated in approximately equal numbers that their companies were moderately or somewhat successful.

The factors identified by the recruits to evaluate company success were perceived most frequently to be very or highly accurate in providing an appropriate evaluation. The factors were regarded as moderately or somewhat accurate by much smaller numbers of interviewees. The usefulness of the factors to indicate the readiness of recruits for fleet assignments was regarded as very or highly useful by a large majority of the recruits. Some of the comments by recruits, however, gave an indication that they have some reservations about preparedness for fleet assignments.

Outcomes Variables and Recruit Training Curriculum

The recruit training outcome variables identified for this study were viewed primarily from a behaviorally oriented non-cognitive perspective that does not address directly the outcomes specified in the Recruit Training Curriculum. The observation, record, and rating instruments were not designed to assess knowledge of recruits. The interview protocol, however, included

some questions that focused on knowledge as the basis for particular behaviors.

An important component of the recruit training program is the Curriculum Outline for U.S. Navy Recruit Training that specifies many desired knowledge and skill outcomes. As a secondary interest in the study, the curriculum was reviewed by expert and experienced training personnel at the Recruit Training Centers to identify study variables related to the Lesson Topic Guides (LTGs). For each LTG, the reviewers specified the particular study outcome variables that were implied or addressed indirectly through the objectives and instructional activities. (See Appendix D.) With few exceptions, the LTGs deal with the study variables in only an implied or inferential manner.

The results of analyzing the Recruit Training curriculum reported in Table 12 show the numbers and percentages of LTGs that address each of the 13 study outcome variables. Only three of the outcome variables are addressed by more than half of the LTGs: responsibility (70%), accountability (58%), and self-discipline (58%). Less than 20% of the LTGs deal with six of the variables: coercion (19%), reliability (14%), perseverance (12%), goal-setting (9%), competitive system (5%), and system manipulation (0%). The remaining four variables are implied in 33% to 44% of the LTGs.

Conclusions

The conclusions for this study are based on the data that were collected to describe the outcomes of recruit training at the Navy's Recruit Training Centers. Although the data collected with the instrument used for observations, records, and ratings provide important evidence on training outcomes, the most useful and insightful information is probably represented by the results of interviews. The conclusions are sequenced in the order that the study variables were addressed in the previous section of the report.

Responsibility

Cognitively, recruits appear to understand responsibility as demonstrated by their knowledge of the general orders of a sentry. The behaviors of recruits when standing watch in their barracks compartments, however, reveal potential deficiencies with respect to application of their knowledge of responsibilities. Furthermore, the reasons for the general orders of a sentry, the importance of watchstanding in the Navy, and the scope of responsibility in operational settings are not understood very well by most recruits. The context in which watchstanding is typically performed during recruit training, i.e., the barracks compartment, may be perceived as unrealistic when compared to operational settings, resulting in less conscientious attention to the discharge of the watchstander's responsibilities. This view is implied possibly in the comments of two recruits in interviews: "Watchstanding should be taken more seriously" and "(Scope of responsibility) increases after boot camp; responsible for more important things."

Reliability

Recruits are aware of the need to be reliable, specifically in watchstanding, through their knowledge of the general orders pertaining to arriving on time and quitting the watch properly. On the other hand, their performance in conducting the barracks compartment watch indicates that the application of their knowledge of reliability requirements, which may be unacceptably low initially, declines during recruit training. The level of reliability demonstrated during barracks compartment watchstanding may be related to an inadequate understanding of the importance of watchstanding in the Navy. Standing watch in the barracks compartment during recruit training may be a setting that contributes to a lack of adequate sensitivity regarding reliability or inhibits demonstration of reliability because of competing

demands on the recruit's time.

Accountability

Accountability is demonstrated by recruits through their behavior as well as their understanding. They generally assume responsibility for their actions when discharging assigned duties and, to a lesser extent, accepting the consequences of negative behaviors. Recruits articulate the meaning of accountability well and give examples of ways in which they are accountable during recruit training. They also feel personally responsible for their own performance on tests, behavior on base, behavior on liberty, and proper grooming and bearing at all times.

Obedience

Although recruits can generally articulate an acceptable meaning of obedience, they reveal ambiguity or uncertainty about obedience operationally. The observation of some unresponsiveness by recruits to the orders of RPOs in the barracks compartments may indicate a failure to understand and/or accept the concept of obedience. The diversity of views held by recruits regarding the reasons for the importance of obedience may be reflected in the uncertainty about the difference between lawful and unlawful orders and the appropriate action to take if given orders thought to be unlawful.

Teamwork

The basic idea of teamwork as a concept is understood by most recruits. Behavior in the barracks compartment offers evidence that teamwork is more likely to be used in group-initiated ways than in individual-initiated ways. Teamwork is perceived by recruits as being used primarily to help each other with daily requirements of training and preparing for inspections. While many recruits link teamwork to company success, the relationship specified most

often is between teamwork and higher scores and more performance recognitions. The acceptance of recruits who are reassigned to a company, a situation where teamwork could be evident, appears to depend largely on the attitudes of Company Commanders toward the reassigned recruits. Team or company identity among recruits is suggested by feelings of sadness when recruits are reassigned from companies.

Pride

The evidence from all sources indicates that pride in the Navy is acquired by recruits during recruit training. In the barracks compartment, recruits increase their use of Navy vocabulary and terminology during training. Feelings that exemplify pride are reactions described when the dress uniform is put on the first time or the National Anthem is heard after joining the Navy. Recruits also imply pride in the Navy by expressing a sense of responsibility for ensuring that shipmates are wearing the uniform correctly and behaving properly in uniform.

Self-Discipline

Recruits are generally able to communicate an understanding of self-discipline as a concept and exhibit such behavior in their choices of elective activities. The use of free time shows a relatively high incidence of choosing training-related activities. Recruits cite a variety of applications of self-discipline during recruit training, mentioning most frequently ways of managing and controlling their personal behavior. The experiences perceived as helping to develop self-discipline, however, tend to have negative connotations arising from the consequences of failure to exercise self-discpline or fear of such consequences.

Goal-Setting

Although most recruits apparently do not change their long-term goals during recruit training, the focus seems to change somewhat from short-term goals to longer-term goals. The expressed goals of many recruits tend to shift from the more personal goal of completing recruit training to achieving recognition for the company and subsequently to personal goals after recruit training. With regard to goal-setting generally, many recruits indicate that they become aware of the importance of goals and working toward established goals.

Perseverance

The performance of recruits in physical training offers some evidence of perseverance by recruits during recruit training. Many recruits consider quitting during the first two weeks of training or, to a much lesser extent, as a consequence of motivational exercises (a negative condition imposed for perseverance). The primary motivation to keep going is personal pride while keeping goals in mind and family support/pride are important motivators for some recruits. Perseverance in unpleasant situations is attributed largely to personal pride or self-respect.

Physical Well-Being

The physical well-being of recruits is generally improved during recruit training as suggested by maintainence of comparable pass rates on the progressively more difficult Physical Training Tests. Sick call records also indicate that a large majority of the sick call dispositions return recruits to regular duty. Many recruits perceive improvements in their physical condition during recruit training with the PT program being cited as the primary reason. Insufficient physical training is regarded by some recruits as contributing to their physical condition worsening during recruit training. While few recruits

start or stop smoking during recruit training, strong support is stated for the Navy's policies on illegal drug use and alcohol abuse.

System Manipulation

System manipulation through the use of sick call assignment of non-performing recruits during inspections is not apparent from the data of this study. Recruits indicate, however, that a wide variety of things are done to get better scores on inspections, the principal means of gaining company recognition; while most of the things done are acceptable, many negative ways of manipulating the system to get better scores are identified by recruits. The number of comments on this matter may be indicative of somewhat extensive system manipulation in ways other than the use of sick call assignment of recruits during inspections. Most comments on company preparation for inspections and assisting slower recruits to prepare for inspections represent acceptable practices. An obvious lack of congruence exists between the comments of recruits on the procedures used to prepare for inspections and the things done to get better scores on inspections. The incongruence may represent different perspectives on inspections with procedures referring to on-going preparation for inspec- tions and things done referring to preparation for specific inspections.

Coercion

Many recruits feel that Company Commanders use unspecified applications of pressure and threats of reassignment (set back or recycle) to produce desired performance or behavior by recruits. The fear of motivational exercise assignment, an action of the Company Commander, is also a factor in encouraging compliant behavior. Recruits indicate that they do the things expected of them for two reasons: a combination of being told to do them and thinking it is

best to do them (external and internal motivation) or the latter reason only. On the other hand, most recruits perceive that force or fear is used at least to some extent in order to get things done by recruits. The leadership style that most recruits would expect to use themselves would involve little or no force or fear unless particular situations required it. Although recruits perceived that force or fear is employed by leaders in the companies, they imply a lack of acceptance of this leadership style themselves.

Competitive System

Teamwork is the overwhelmingly most common factor specified by recruits to use personally in evaluating company success. Company performance measures (flags, awards, scores) and attitudes/motivation are the stated preferences of factors for some recruits. While most recruits regard their companies as being relatively successful, company standing in the training group is cited more often than teamwork as the basis for such judgement. The factors identified are perceived to be reasonably accurate in providing appropriate company evaluation and indicating the readiness of recruits for fleet assignments.

Outcomes Variables and Recruit Training Curriculum

The recruit training outcomes addressed in this study are not incorporated directly or specifically in the Curriculum Outline for U.S. Navy Recruit Training. In the absence of explicit objectives and related instructional activities being specified in the curriculum, the assumption must be made that the desired behaviors represented by these variables are acquired through other components of recruit training, incidental learning, or models of behavior to which recruits are exposed. While the content of many LTGs may offer opportunities to teach the knowledge and skills needed to exhibit desired behaviors specified for this study, the behaviors themselves are not

deliberately addressed as training outcomes to be achieved.

Recommendations

The recommendations based on the results of this study are posed with the limitation of scope and database of the study in mind. In addition to the insights gained from the data reported in the findings, the special task force has provided contextual references to enhance the interpretation of the results in relation to the recruit training environment. The recommendations that are offered for consideration are the following:

1. The variables specified for this study should be reviewed by specialists in Navy recruit training to determine their validity and desirability as training outcomes. The special task group of Navy recruit training specialists who identified these variables for the study attempted to identify behavioral domains that apply operationally to training as it exists at the present time. Judgments were not made regarding the desirability or priority of these outcomes.

2. The performance levels demonstrated by recruits on those variables identified as desirable should be considered with respect to acceptability for recruit training and fleet preparedness. A related factor to consider is the congruence or incongruence between the apparent knowledge levels and demonstrated behaviors on some variables.

3. The relationships among the variables should be examined to identify behavioral domains that may be related positively or negatively. In particular, those variables that may assume negative connotations in the training environment (e.g., system manipulation, coercion, and competitive system) should be viewed with respect to their potential impact on the other variables.

4. Formal and informal evaluation of recruit training should be analyzed

thoroughly from the perspectives of recruits, company leaders, training officers, Recruit Training Command policies and priorities, representatives of subsequent training activities, and fleet representatives. Special attention should be given to the degree of congruence among the stated recruit training outcomes, the content and organization of training, the training delivery system, the quality of training, the priorities of various training outcomes, and the impact of training on various clientele (recruits, training leaders, training commands, and fleet operations).

5. Recruit training should be reviewed to ascertain reasonable and realistic expectations with regard to behavioral changes for the recruit population, especially in non-cognitive areas (skills, attitudes, and other potential domains). The diverse backgrounds, aptitudes, abilities, and values of recruits may be factors that should influence expectations to varying degrees.

6. Potential problem areas identified in this study should be investigated by collecting and analyzing data from a wider variety of situations in which desired or undesired behaviors would be expected to occur. The convergence of data from multiple sources that reveal similar findings would provide a more definitive basis for determining the existence and nature of problems as well as possibly developing strategies for solutions.

APPENDIX A

DATA TABLES

TABLE 2

NUMBER OF OBSERVATIONS AND PERCENTAGES OF RECRUITS IN LONGITUDINAL AND CROSS-SECTIONAL COMPANIES EXHIBITING BEHAVIORS LISTED ON THE BARRACKS COMPARTMENT WATCHSTANDING CHECKLIST BY REPORTING PERIOD

Item	Type of Company: Longitudinal, Reporting Period 1		Longitudinal, Reporting Period 2		Cross-sectional, Reporting Period 1		Cross-sectional, Reporting Period 2		Total, Reporting Period 1		Total, Reporting Period 2	
	f	%	f	%	f	%	f	%	f	%	f	%
Arrived on time	22	86.4	30	86.7	19	94.7	27	88.9	41	90.2	57	87.7
Dressed in proper uniform	22	95.5	29	96.6	19	100.0	27	92.6	41	97.6	56	94.6
Assumed watch properly	21	90.5	29	93.1	19	89.5	27	88.9	40	90.0	56	91.0
Talked only in line of duty	20	75.0	30	80.0	18	88.9	24	91.7	38	84.2	54	85.2
Challenged persons correctly	22	40.9	30	76.7	18	72.2	27	59.3	40	55.0	57	63.2
Made rounds as required	20	100.0	29	96.6	16	100.0	27	100.0	36	100.0	56	98.2
Quit watch properly	16	93.8	21	90.5	10	90.0	15	73.3	26	92.3	36	83.3
Remained alert during watch	16	87.5	26	80.8	16	87.5	24	79.2	32	87.5	50	80.0
Total	159	83.6	224	87.5	135	91.1	198	83.3	294	87.1	422	85.6

A-1

TABLE 3

FREQUENCIES AND PERCENTAGES OF RECRUITS IN LONGITUDINAL AND CROSS-SECTIONAL COMPANIES DEMONSTRATING DEGREES OF ACCOUNTABILITY ON THE LCPO SCREENING/MAST RECORD FORM BY REPORTING PERIOD

Item	Type of Company: Longitudinal, Reporting Period 1 f	%	Longitudinal, Reporting Period 2 f	%	Cross-sectional, Reporting Period 1 f	%	Cross-sectional, Reporting Period 2 f	%	Total, Reporting Period 1 f	%	Total, Reporting Period 2 f	%
Denies information	0	0.0	0	0.0	0	0.0	1	1.4	0	0.0	1	1.1
Denies responsibility	1	5.2	0	0.0	3	5.6	4	5.8	4	5.5	4	4.3
Accepts responsibility somewhat	5	26.3	1	4.4	12	22.2	18	26.1	17	23.3	19	20.7
Accepts responsibility mostly	2	10.5	3	13.0	3	5.6	10	14.5	5	6.8	13	14.1
Accepts responsibility completely	11	57.8	19	82.6	36	66.7	37	52.2	47	64.4	55	59.8
Total	19		23		54		69		73		92	

A-2

TABLE 4

FREQUENCIES AND PERCENTAGES OF RATINGS OF RECRUITS IN LONGITUDINAL AND CROSS-SECTIONAL COMPANIES ON THE RECRUIT PETTY OFFICER RATING FORM BY REPORTING PERIOD

Item	Type of Company: Longitudinal (N=158) f	%	Cross-sectional (N=132) f	%	Total (N=290) f	%
Understanding of duties						
Outstanding	76	48.1	60	45.4	136	46.9
High	59	37.3	64	48.9	123	42.4
Moderate	23	14.6	6	4.6	29	10.0
Low	0	0.0	2	1.5	2	.7
Accountability for duties						
Outstanding	80	50.6	80	60.6	160	55.2
High	51	32.3	12	31.8	93	32.1
Moderate	27	17.1	10	7.6	37	12.8
Low	0	0.0	0	0.0	0	0.0

A-3

TABLE 5

NUMBERS OF OBSERVATIONS AND PERCENTAGES OF DESIRED BEHAVIORS BY RECRUITS IN LONGITUDINAL AND CROSS-SECTIONAL COMPANIES ON THE ITEMS ON THE RECRUIT NIGHTLY ROUTINE CHECKLIST BY REPORTING PERIOD

Item		Type of Company: Longitudinal, Reporting Period 1	Longitudinal, Reporting Period 2	Cross-sectional, Reporting Period 1	Cross-sectional, Reporting Period 2	Total, Reporting Period 1	Total, Reporting Period 2
Following orders of RPO's immediately	N	81	97	65	47	146	144
	%	80.3	79.4	76.9	72.3	78.8	77.1
Assisting other recruits if recruit or crew completes task early (e.g., copying schedule, preparing uniforms, preparing barracks)	N	61	94	51	40	112	134
	%	86.9	77.7	74.5	80.0	81.3	78.4
Doing tasks for recruits assigned elsewhere outside the compartment (e.g., making bunks, folding clothes, passing out laundry)	N	59	100	50	64	107	164
	%	91.2	85.0	80.0	90.6	86.0	87.2
Using Navy vocabulary/ terminology (e.g., scuttlebutt, head, bulkhead.)	N	76	135	64	48	140	183
	%	82.9	91.1	73.4	81.3	78.6	88.5

TABLE 6

FREQUENCIES, PERCENTAGES, AND MEANS FOR FREE-TIME ACTIVITIES REPORTED BY RECRUITS IN LONGITUDINAL AND CROSS-SECTIONAL COMPANIES

Activity	Type of Company: Longitudinal f	Longitudinal %	Cross-sectional f	Cross-sectional %	Total f	Total %
Folding and stowing/bunk practice	119	58.5	152	64.7	269	61.8
Shining shoes	156	78.0	170	72.3	326	74.9
Individual infantry/rifle practice	37	18.5	38	16.2	75	17.2
Studying	154	77.0	182	77.4	336	77.2
Physical training	93	46.5	101	43.0	194	44.6
Subtotal training	559	----	643	----	1,200	----
Writing letters	158	79.0	164	69.8	322	74.0
Church	85	42.0	110	46.8	195	44.8
Rest/relaxation	125	62.5	137	58.3	262	60.2
Subtotal personal	368	----	411	----	779	----
Total	925	----	1,054	----	1,979	----
Number of recruits	200		235		435	
Mean						
Training activities	2.8		2.7		2.8	
Personal activities	1.8		1.7		1.8	
Total	4.6		4.4		4.5	

TABLE 7

NUMBERS AND PERCENTAGES OF RECRUITS IN LONGITUDINAL AND CROSS-SECTIONAL COMPANIES RESPONDING TO ITEMS ABOUT GOAL-SETTING ON THE INFORMAL CONVERSATION CHECKLIST BY REPORTING PERIOD

Item		Type of Company: Longitudinal, Reporting Period 1	Longitudinal, Reporting Period 2	Cross-sectional, Reporting Period 1	Cross-sectional, Reporting Period 2	Total, Reporting Period 1	Total, Reporting Period 2
Individual goals during recruit training	N	81	58	44	26	125	84
	%	59.1	32.2	68.8	51.0	62.2	36.4
Company goals for recognition during recruit training	N	45	60	11	4	56	64
	%	32.9	33.3	17.2	7.8	27.8	27.7
Individual goals after recruit training	N	11	62	9	21	20	83
	%	8.0	34.5	14.0	41.2	10.0	35.9
Total		137	180	64	51	201	231

TABLE 8

NUMBERS OF RECRUITS OBSERVED AND PERCENTAGES OF RECRUITS COMPLETING PHYSICAL TRAINING IN LONGITUDINAL AND CROSS-SECTIONAL COMPANIES BY REPORTING PERIOD

Item		Type of Company: Longitudinal, Reporting Period 1	Longitudinal, Reporting Period 2	Cross-sectional, Reporting Period 1	Cross-sectional, Reporting Period 2	Total, Reporting Period 1	Total, Reporting Period 2
Physical training completed	N	1,319	890	2,687	1,552	4,006	2,442
	%	90.7	94.2	98.4	91.3	89.1	92.3

A-7

TABLE 9

NUMBERS OF RECRUITS AND PERCENTAGES PASSING THE PHYSICAL TRAINING TESTS IN LONGITUDINAL AND CROSS-SECTIONAL COMPANIES BY TEST NUMBER

Item	Type of Company: Longitudinal N	Longitudinal %	Cross-sectional N	Cross-sectional %	Total N	Total %
Test 1	591	93.1	612	91.9	1,203	92.5
Test 2	501	95.0	522	91.4	1,023	93.2
Test 3	477	93.9	523	93.1	1,000	93.5
Total	1,569	93.9	1,657	92.2	3,226	93.1

A-8

TABLE 10

FREQUENCIES AND PERCENTAGES OF RECRUITS IN LONGITUDINAL AND CROSS-SECTIONAL COMPANIES BY DISPOSITION OF SICK CALLS

Item	Type of Company: Longitudinal f	Longitudinal %	Cross-sectional f	Cross-sectional %	Total f	Total %
Return to full duty	356	68.6	638	75.8	994	73.0
Assign to light duty	101	19.5	108	12.8	209	15.4
Assign to bed rest	46	8.9	47	5.6	93	6.8
Recycle/setback	16	3.1	49	5.8	65	4.8
Total	519	---	842	---	1,361	---

A-9

TABLE 11

TOTAL NUMBERS OF SICK CALLS, NUMBERS OF SICK CALLS DURING INSPECTIONS, AND PERCENTAGES OF SICK CALLS DURING INSPECTION IN LONGITUDINAL AND CROSS-SECTIONAL COMPANIES

Item	Type of Company		Total
	Longitudinal	Cross-sectional	
Total number of sick calls	628	924	1,552
Number of sick calls during inspections	40	50	90
Sick calls during inspections as a percentage of total number of sick calls	6.4	5.4	5.8

A-10

TABLE 12

FREQUENCIES AND PERCENTAGES OF LESSON TOPIC GUIDES IN THE RECRUIT TRAINING CURRICULUM THAT ADDRESS TRAINING OUTCOMES SPECIFIED FOR THE STUDY

Training Outcome	Lesson Topic Guides That Address Outcome (N = 43)	
	f	%
Responsibility	30	69.8
Reliability	6	14.0
Accountability	25	58.1
Obedience	19	44.2
Teamwork	14	32.6
Pride	17	39.5
Self-discipline	25	58.1
Goal-setting	4	9.3
Perseverance	5	11.6
Physical well-being	14	32.6
System manipulation	0	0.0
Coercion	8	18.6
Competitive system	2	4.7